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OPERATION OF AGRICULTURAL CONSERVATION PROGRAMS IN ILLINOIS

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The changes and adjustments made on individual farms since the adoption of the first Agricultural Adjustment Act were analyzed to ascertain the accomplishments, implications, and probable effects of the Agricultural Conservation Program in promoting the long-time objective of soil conservation and economic use of agricultural resources, and to provide information useful in formulating and revising subsequent programs.

1/ This publication is a digest of the manuscript of a detailed report. Typewritten copies of the full report on this study are filed in the offices of the Department of Agricultural Economics, University of Illinois, Urbana, Illinois; the Illinois State office of the Agricultural Adjustment Administration, Decatur, Illinois; the North Central Division of the Agricultural Adjustment Administration, and the Bureau of Agricultural Economics, Washington, D. C.

2/ Advisory assistance was given by R. D. Jennings and C. W. Crickman, Bureau of Agricultural Economics, and by J. B. Andrews, Administrative Assistant, Extension Service in Agriculture and Home Economics and representative of the Extension Service on the State Agricultural Conservation Committee.

The basic data for this study were secured for 507 non-selected farms in and adjoining Gridley Township, McLean County; Wethersfield Township, Henry County; and Pin Oak Township, Madison County. These areas were selected because they were considered representative of the agricultural conditions in the farming-type areas in which they were located. The data for the years 1936-38 were obtained from the County Conservation offices and from farmers by personal interview with each farm operator. Data for a period prior to the AAA (1932-33) were obtained from the 1934 Corn-Hog Contracts and from survey records taken in the areas prior to the enactment of the AAA. The major emphasis of this report is placed on the 1938 Agricultural Adjustment Program.

PARTICIPATION IN THE 1938 PROGRAM

Thirty-seven percent of the farm operators in Gridley Township, 60 percent in Wethersfield Township, and 36 percent in Pin Oak Township, participated in the 1938 Agricultural Conservation Programs. The proportion of total acreage in the program in the three areas was slightly larger than the proportion of the total number of farm operators. In Gridley Township 38 percent, in Wethersfield Township 62 percent, and in Pin Oak Township 37 percent of the farm land was in the 1938 program.

Of the cooperating farms in the 1938 program, which were identical in size from 1932-38, 42 percent have participated in each of the five programs, 31 percent in four programs, 12 percent in three programs, 10 percent in two programs, and 5 percent in only one program. Most of the farms which remained out of the program for only 1 year were out of the 1937 program following the dry hot fall of 1936 when grass seedings were killed on many farms. Except for these farms which were out of the 1937 program because of loss of seedings, only 14 percent of all farms became cooperators again after once discontinuing participation in a previous year. Ninety-five percent of the 1938 non-cooperating farms, which had participated in at least one previous year and had dropped out of the program, never participated again up to and including the 1938 program.

EFFECTIVENESS OF THE 1938 PROGRAM

Farmers in each of three townships who participated in the 1938 program grew approximately 15 percent less acres of soil-depleting crops in 1938 than in the two years 1932-33, while nonparticipators grew approximately the same acreage of soil-depleting crops in 1938 as in the earlier years. The reduction in corn acreage on participating farms was likewise about 15 percent in Gridley and Wethersfield Townships; in Pin Oak Township it was about 30 percent. Nonparticipators in Gridley Township had not made any change in corn acreage in 1938 as compared with 1932-33. Those in Wethersfield Township had increased corn acreage about 8 percent and those in Pin Oak Township had decreased it about 7 percent. In Pin Oak Township both participators and nonparticipators had a larger acreage of wheat in 1938 than in 1932-33. The respective increases were 9 and 18 percent. The proportion of the cropland in hay and pasture was larger on the participating farms than on the nonparticipating farms in 1938 in each township. The acreage of hay and pasture on cropland was 88 percent larger on participating and 50 percent larger on nonparticipating farms in 1938 than in 1932-33 in Pin Oak Township; 54 percent larger on participating farms, but 1 percent less on nonparticipating farms in Gridley Township; and 15 percent larger on participating and 51 percent larger on nonparticipating farms in Wethersfield Township.

Historical information is not available for measuring the change in acreage of legume and grass seeded with small grain in 1938 as compared with 1932-33, but a relationship can be shown between participating and nonparticipating

farms in 1938. The nonparticipating farmers in Gridley Township sowed 58.2 acres of grasses and legumes per 100 acres of small grains sown in 1938, while the participating farmers sowed 75 acres, or 29 percent more. The nonparticipating farmers in Wethersfield Township sowed 69 acres and the nonparticipating farmers in Pin Oak Township sowed 42 acres of grasses and legumes per 100 acres of small grain sown. The participators in these two areas sowed 14 and 43 percent, respectively, more than the nonparticipators.

In Gridley Township, participating farmers applied limestone to 5 percent of the cropland in 1938 as compared with 1 percent in 1932-33 and nonparticipators applied limestone to 2 percent as compared with 1 percent in 1932-33. A similar comparison in Wethersfield Township showed that participators applied limestone to 6 percent in 1938 as compared with 2 percent in 1932-33 and nonparticipators to 5 percent in 1938 as compared with 1 percent in 1932-33. In Pin Oak Township the cooperating farmers applied limestone to 8 percent of the cropland and the nonparticipators spread it on 10 percent of the cropland. This 1938 situation in Pin Oak Township is unusual because 1938 was the only year in a 13-year period in which this same group of 1938 non-cooperating farms spread more limestone than the group of cooperating farms.

RELATIONSHIP BETWEEN ADJUSTMENT NEEDED IN ACREAGE OF SOIL-DEPLETING CROPS AND PARTICIPATION

The farm-operating units in each township were divided into three approximately equal groups, according to the need for adjustment in soil-depleting crops as shown by a comparison of the indicated soil-depleting goal for each farm with the acreage that was grown in the 2-year period 1932-33. The indicated soil-depleting goal for each farm was determined from a soil management field report, Form NCR-203, obtained in the fall of 1937 by committeemen who visited every farm in the county. The three groups are classified as (1) farms needing most adjustment, (2) farms needing moderate adjustment, and (3) farms needing least adjustment. The farms on which the indicated soil-depleting goal was larger than the acreage grown in 1932-33, were included in the group needing least adjustment, inasmuch as they need no downward adjustment.

Participation was highest in the group needing least adjustment. In Gridley Township, 79 percent of all farms needing least adjustment were in the 1938 AAA program while only 29 percent of those needing most adjustment cooperated. In Wethersfield Township, 72 percent of the farms needing least adjustment and 52 percent of those needing most adjustment were in the program. Similarly, in Pin Oak Township the participation was 58 and 36 percent respectively.

PRODUCTIVE CAPACITY AND PARTICIPATION

The corn yield and the productivity index established under the AGP are probably the most satisfactory criteria of the present productive capacity of the soil because they are based on normal yields for the farm. Since there is a high degree of correlation between the two measures of present productive capacity of the farm, one comparison will suffice to show the relation between participating and nonparticipating farms. The participating farms tended to be better farms than nonparticipating farms. In Wethersfield Township, the participating farms had a 4 percent higher productivity index, in Pin Oak Township a 7 percent, and in Gridley Township a 16 percent higher productivity index than the nonparticipating farms. Plats showing the location of participating farms indicate that inherently the nonparticipating farms were poorer farms. This is noted from the fact that noticeably less participation is found on the more rolling land.

ALLOTMENTS, ADJUSTMENTS, PAYMENTS, AND PARTICIPATION

The difference in allotments on participating and nonparticipating farms is small, but an analysis of the three areas shows that the participating farms had somewhat larger allotments in 1938. The larger corn allotment per 100 crop acres, varying from 0.5 acre in Pin Oak Township to 2.8 acres in Gridley Township, may have been some additional incentive for participating. The total soil-depleting allotment per 100 crop acres was 0.8 acre larger on nonparticipating farms than on participating farms in Pin Oak Township, but 2.1 acres larger on participating than on nonparticipating farms in Gridley Township, and 1.1 acres larger in Wethersfield Township.

The close relationship between allotments on participating and nonparticipating farms is due largely to the methods for computing allotments established by the 1938 program. In general, equal weight was given to the indicated soil-depleting goal (Form NCR-203) and 1936-37 planted acreage, adjusted for participation in the 1936 and 1937 programs, in establishing allotments. The participating farms in 1938 as a group were those on which the relation between the historical acreages and the indicated goals was considerably closer than on the nonparticipating farms, as a group. The indicated goals were higher and the acreages in 1932-33 were lower on the participating than on the nonparticipating farms.

The close association between the amount of adjustment needed and participation already has been discussed briefly. The farms in Gridley Township that needed most adjustment in soil-depleting crops had to reduce corn 13.6 acres per 100 crop acres below the acreage in 1932-33 to meet the allotment, while those needing least adjustment were required to reduce only 8.9 acres. In Wethersfield Township, the farms needing most adjustment had to make the same reduction as the corresponding group in Gridley Township, but those needing least adjustment had to reduce only 3.4 acres. Farms needing most adjustment in Pin Oak Township had to reduce 11.8 acres in corn, while those needing least adjustment had to reduce only 6.2 acres in corn per 100 crop acres to meet the corn allotment.

The maximum payment for any farm is made upon acreage allotments and productivity indexes rather than upon the adjustment required to meet the allotments. The acreage allotments, which are based upon productive capacity and cropping history, do not have a close direct relationship with the amount of adjustment required. Therefore, the payment per acre of adjustment required to meet the allotment tends to increase as the amount of reduction decreases. This can be substantiated by the fact that participating farms in Gridley Township could earn a corn payment of $17.52 per acre of adjustment required from 1932-33 to meet the allotment, while the nonparticipating farms could earn only $11.25 per acre of adjustment. In the Westhersfield Township, the corresponding comparison was $27.49 and $7.25 respectively; and in Pin Oak Township the variation was $8.81 and $6.22 respectively.

The difference between participating and nonparticipating farms in adjustment required to meet the allotment, and in payment per acre of adjustment, is even larger when computed from the 1936-37 adjusted acreage base. The interviews with farmers indicate that they give more consideration to the change in acreage from their plantings in immediately preceding years than from the acreage planted in years previous to the AAA programs in deciding whether or not they will participate in the current program.

The best selling point of the programs has been the size of the payment in relation to acres of adjustment required to meet the allotment. This was admitted by many cooperating farmers in the 1938 program by the statement that they could make more money by participating than by farming the land; many more of the farmers stated that they could not afford to stay out of the 1939 program.

These statements are substantiated by a comparison of the intentions for participation at the time survey data were collected and at the time of signing of the "Plan for Participation" (NCR-303). In Gridley Township, 49.2 percent of the farmers who stated in October that they would not cooperate in 1939 and 78.0 percent of those who were undecided in the fall had decided by May 1 to participate in order to obtain the higher payments offered in 1939. The Wethersfield survey was made in January; 72.4 percent of those farmers who said they were not going into the 1939 program signed Form 303 and all of those who were undecided in the winter are planning to participate. The Pin Oak survey was not made until March, therefore many of the farmers knew that they could earn a larger payment in 1939 than in 1938, but even so, 23.9 percent of the men who said "no" when the survey was taken later signed Form 303.

TENANCY AND PARTICIPATION

More participation was found among owner-operated farms than among tenant-operated farms in each of the three areas studied. A comparison between tenancy and participation for all of the farms studied showed that 53.1 percent of the owner-operator farms but only 31.5 percent of the tenant farms were in the 1938 program. The cropping history for soil-depleting crops on tenant farms generally is further out of line with soil-conserving goals than on owner-operated farms. Hence, tenants generally must make larger reductions to meet their allotments than owner-operators, which means also that on the average their payment per acre of adjustment is less. Some tenants are kept out of the program by the unwillingness of their landlord to participate.

SIZE OF FARM AND PARTICIPATION

For purposes of this study, farms were sorted into four acreage classifications: (1) those under 70 acres, (2) 71-150 acres, (3) 151-210 acres, and (4) over 210 acres. In the analysis of farms in these groups it was found that the largest percentage participation was in the size grouping varying from 70 to 150 acres.

A general comment frequently given by operators on farm units under 70 acres in size was that they cannot participate because the program does not allow enough feed for their livestock. In order to determine the reliability of this comment, an analysis of the small farms in Pin Oak Township was made to determine the relationship between the feed requirements of the livestock on hand and the feed produced by participating and nonparticipating farmers. The average yields of corn and wheat established by the AAA and the county average yield of oats for the past four years were used. The production of grain was determined by multiplying the yield by both the acreages planted in 1938 and the acreages allotted in 1938.

It was found that the feed requirements for these farm units were 36.4 percent more than the total grain that could be produced if the operators participated in the ACP and 14.9 percent less than the estimated production on the

1938 acreage. Further analysis indicates that by staying out of the program these farmers could sell their wheat for cash, feed their corn and oats and have enough left for seed.

PARTICIPATION IN RELATION TO LOCATION OF TOWNSHIP COMMITTEEMEN

In all three areas studied, the greatest concentration of participating farms in the 1938 program was in the community in which the township committeemen lived. In each township the committeemen were concentrated in one community with similar physical features and soil types; and on better than average farms. The number of townships studied, however, was too small to draw definite conclusions from the results, but it presents a problem that merits further study. If similar situations are widespread throughout the State, it may be found advisable to divide each township into three districts on the basis of soil type and topography, thereby avoiding the localization of committeemen and increasing the possibility of giving the farmer on poorer land representation in local administration.

1938 ALLOTMENT IN RELATION TO PRE-AAA ACREAGES ON FARMS IN AND OUT OF THE PROGRAM IN 1936 and 1937

A means of determining the effects of past participation on present allotments is to compare 1938 allotments on participating and nonparticipating farms in the 1936 and 1937 programs with acreages on each group of farms prior to the AAA. In Pin Oak Township, the farmers not in the program in either 1936 or 1937 received a 1938 corn allotment that was 10.2 percent larger and a 1938 soil-depleting allotment that was 3.9 percent larger in relation to pre-AAA acreage than those farms that participated both years. Less striking results were found in the other two areas. In Gridley Township, the farmers not cooperating in either year had 1.7 percent larger corn allotment, but a 2.3 percent less soil-depleting allotment in 1938, than those farmers that cooperated both years. In Wethersfield Township, the nonparticipating farms in the 2 years had 1.8 percent larger soil-depleting allotment and a 5.0 percent smaller corn allotment than the participating farms in 1938 in relation to the historical acreage. The lack of uniformity between townships and within a given township tends to indicate that participation or nonparticipation in the 1936 and 1937 programs may have had little effect upon the 1938 allotment. However, in individual instances where farmers increased their depleting crop acres at the expense of non-depleting crops in 1936 or 1937, there was a noticeably larger 1938 allotment in relation to the pre-AAA acreages than on other farms that stayed in the program in these same 2 years, even though credit up to 17.6 percent could be given on the participating farms. The lack of uniformity, which existed in the results of the township data presented, is probably due to factors such as the difference in use of the strike-over procedure in different townships, participation in the 1934 and 1935 Corn-Hog Program, or possibly other factors which have not been analyzed in the current study.

NUMBERS OF LIVESTOCK ON PARTICIPATING AND NONPARTICIPATING FARMS

Farms participating in the 1938 program had more livestock than nonparticipating farms. This was true for each class of livestock except sheep; the nonparticipating farms had more sheep in all three areas. The participating farms had an average of 1 more horse, 1 more dairy cattle, 2 more beef cattle, 12 more hogs, and 26 more hens than nonparticipating farms. There was no

appreciable difference in the average size of participating and nonparticipating farms.

In Gridley Township, it is possible to show the changes that have occurred since the AAA was enacted because farm-survey records taken in 1931 are available. This analysis shows that there has been a decrease in horses, beef cattle, and sheep, with the participating farms making the least reduction. There has been an increase in dairy cattle and poultry; the increase on nonparticipating farms was only 35.8 percent and 11.8 percent, respectively, while on participating farms the increase in poultry was 39.8 percent and dairy more than doubled. The conservation program has tended to decrease the man labor requirements on crops. Apparently this time formerly used in crop production is now being used in this area for the production of those classes of livestock through which a large amount of labor can be marketed for the amount of feed consumed.

FARMERS' REASONS FOR NOT PARTICIPATING

An important phase of the study was a determination of the personal reaction of individual farmers to the Agricultural Conservation Program. The reasons for not participating were obtained from each nonparticipator. A summary of these reveal that there are four major reasons for not participating which account for more than 80 percent of all reasons. These are (1) allotment too low, (2) landlord not willing, (3) opposed to the program, and (4) farm too small. A corn allotment that was too low was the most outstanding reason and was given by 24.5 percent of all nonparticipating farmers. Less concern was given to total soil-depleting allotment; however, some farmers gave this as a reason.

Of all nonparticipating farmers, 37.6 percent mentioned allotments as either the most important or as the second important reason for staying out of the 1938 program. The landlord was blamed for keeping the tenant out of the program in 22.6 percent of the cases, 16.8 percent of the farmers were opposed to the program, 16.4 percent said their farm was too small, and the rest gave various reasons.

SUMMARY, RECOMMENDATIONS AND CONCLUSIONS

This analysis reveals that the participating farms generally are those needing smaller adjustments to meet the allotments, which closely approach the indicated goal, so that a relatively large payment per 100 crop acres and per acre reduction required can be earned, as compared with the average of all farms. They have a relatively high productive capacity as indicated by productivity index and established corn yield, which was being fairly well conserved previous to the inauguration of AAA programs by raising livestock, spreading limestone, and sowing a larger amount of legume and grass seed. A relatively high percentage of them are medium-sized, owner-operated farms.

It is not this cooperating farmer that the program is most interested in since he has been doing and probably will continue to do a good job of farming. It is the nonparticipating farmers that need to be considered. The planned participation for 1939 would indicate that participation will be much above 1938 but, for the most part, it is accomplished by large cash payments when grain prices are low. In event that current payments to farmers must be curtailed or

larger adjustments required, it is probable that some alternative provisions for obtaining and maintaining participation will have to be adopted to make the program most successful.

This study indicates that present procedures for establishing allotments and maximum payments have resulted in a disproportionately high payment being made for the acreage adjustments obtained on farms given allotments closely in line with past practice, and relatively low payments being offered for the acreage adjustments required on farms having to make substantial shifts in order to meet the allotments assigned to them. Consequently, many of the farmers who have remained out of the programs have been those of whom relatively large adjustments were required. Thus, there probably has not been a most effective expenditure of funds in terms of additional conservation or adjustment of acreage.

Because of this and because widespread participation is desirable and necessary from the standpoint of both conservation and acreage adjustment, the problem appears to resolve itself into one of setting allotments and of devising methods of payment that will result in keeping in full compliance the farmer who is already following a well-balanced system of farming, while at the same time leaving a maximum amount of available funds for inducing changes by those farmers who have relatively large adjustments to make in order to be in full compliance with the program.

The effectiveness of current agricultural-conservation programs, with or without revisions, can be substantially increased in any year by a more extensive educational program which will reach farm operators, landlords, farmers' wives, farm youths, and business men. It is particularly desirable to contact all of these groups because of the influence they have on the farm operator.